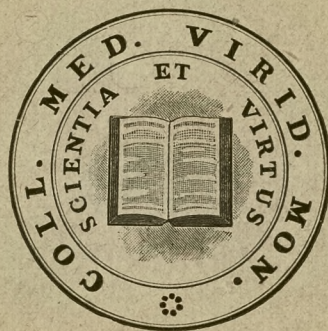
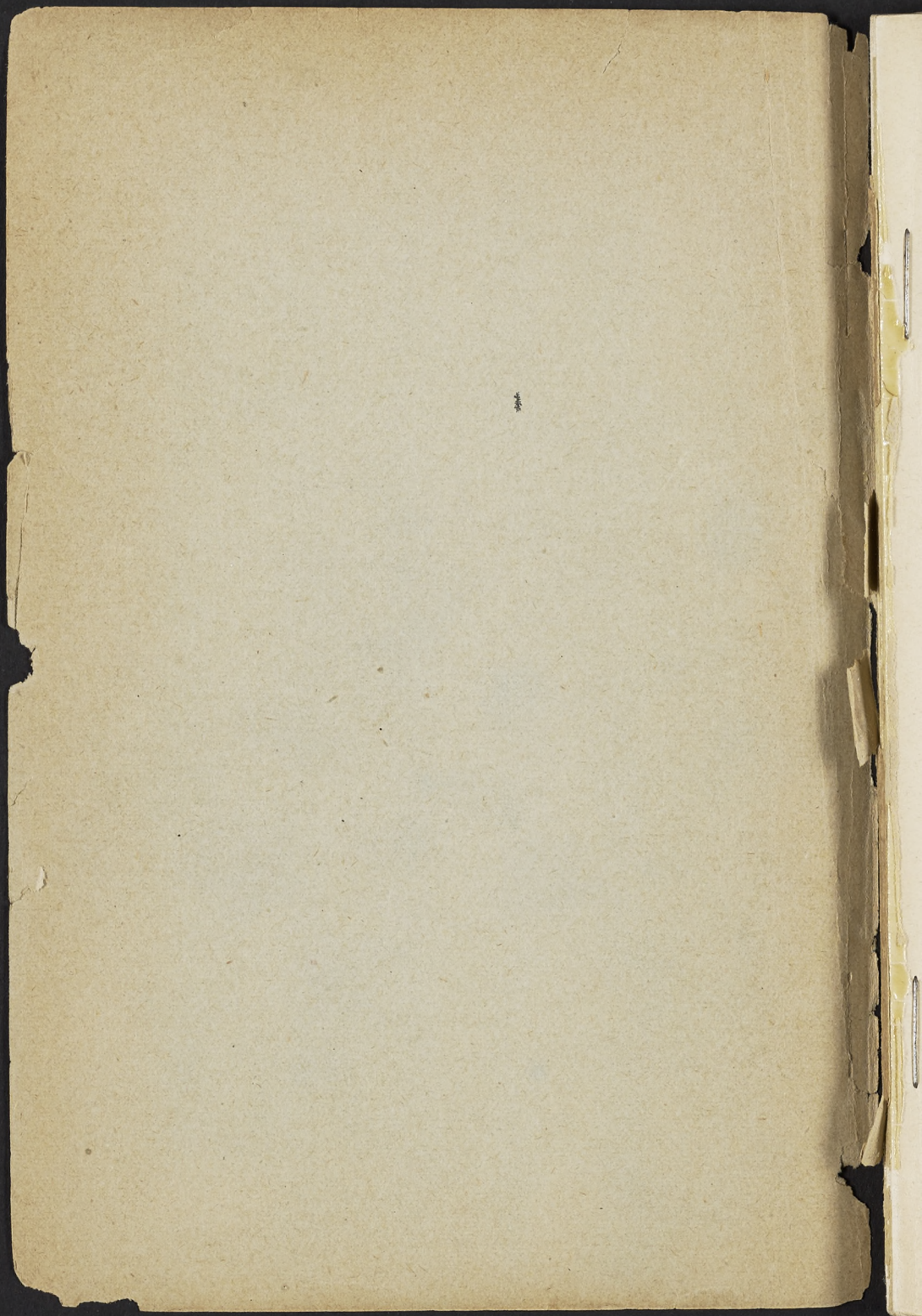


CATALOGUE
OF
MIDDLEBURY COLLEGE



1899-1900



CATALOGUE
OF THE
OFFICERS AND STUDENTS
OF
MIDDLEBURY COLLEGE
MIDDLEBURY, VERMONT

1899-1900

PUBLISHED FOR THE COLLEGE
1899

EXTRACT FROM AN ADDRESS

Delivered by the REV. TRUMAN M. POST, D. D., before the Alumni of Middlebury College, July 1, 1879, at the semi-centennial reunion of the class of '29:

Our Alma Mater challenges our love, honor and support *because of her record*. As I stand here at the close of half a century from graduation, having lived and wandered most of those years amidst those vast regions where new States are born, and having seen what hands and brains have created, shaped and guided and defended civil order there, and have moulded and vitalized its organic forces, I have felt ever the more that freedom, Christianity and civilization, and the life of the nation owe much to Vermont,—to her children and her colleges, even were their history now to close. Her sons and her ideas and their works are found everywhere, and seldom to her dishonor, whether I look at the field of thought or action, the departments of literary, professional, political, educational, artistic or industrial life. And when I call to mind, moreover, the names inviting rehearsal but too numerous for the hour, of those who, under the shadow of the cross, lie in foreign graves, through distant continents and isles of the ocean; or who, in our own land, sleep in tombs beneath the shadow of the churches that have been consecrated by their Christian eloquence and their sweet lives and holy deaths; or when I recall those who have gone to their rest, with the Stars and Stripes waving over or wrapped as a shroud around them in their glorious repose, beside remote rivers and mountains, or amid dark forests and unknown wilds, or in the deeps of the ocean; when I recall with these all who have gone down to death in manifold ways and places, that Christianity and liberty and country might not die,—when I look at such histories and their results, and at all those who in their time and sphere have done and are doing good service to truth and humanity, I feel that institutions creative of such men should never perish from the love and honor of men.

HISTORICAL.

LEGISLATIVE ACTION.

From the Journals of the General Assembly of the State of Vermont:

Wednesday, Oct. 31, 1798: A petition of Gamaliel Painter and others, trustees of the Addison County Grammar School, stating that the petitioners and others, inhabitants of Middlebury, induced by an ardent desire to promote and encourage the education of youth by establishing and carrying into immediate operation, a college or university within the State, have erected large and convenient buildings suitable to the purposes of a college, and praying the legislature to establish a college in Middlebury and to grant a charter of incorporation to such trustees as shall be appointed, vesting in such trustees such rights and privileges as are enjoyed and exercised by such bodies,—was referred to a committee consisting of one member from each county, to be nominated by the clerk of the house. Referred, Monday, Nov. 5, 1798, to the next session of the legislature.

Saturday, Oct. 12, 1799: Petition referred from last session of the legislature referred to a committee to join a committee from the council, and on Monday, Nov. 4, 1799, referred again to the next session of the legislature.

Saturday, Oct. 11, 1800 (two days after the opening of the session, at Middlebury): Petition referred from the last session of the general assembly referred to a committee to join with one appointed on the part of the council.

Tuesday, Oct. 28, 1800: Committee reported a bill entitled "An act incorporating and establishing a college at Middlebury, in the County of Addison"; the incorporation being declared expedient by the house in committee of the whole, Wednesday, Oct. 29, 1800.

Friday, Oct. 31, 1800: Bill read a second time, and ordered engrossed and sent to the governor and council for revision and concurrence or proposal of amendment; yeas, 117; nays, 51. The governor and council concurred without amendment, in a message to the house, Saturday, Nov. 1, 1800.

EXTRACTS FROM THE CHARTER.

STATE OF VERMONT.

ISAAC TICHENOR,

esquire Governor and Commander-in-Chief in, and over the State of Vermont, To all to whom these presents shall come, GREETING.

Know ye, That I the said Isaac Tichenor by virtue of the Authority in me vested, and in pursuance of a certain Act of the Legislature of said State passed the first day of November in the Year of our Lord eighteen hundred, entitled An Act incorporating and establishing a College at Middlebury in the County of Addison—do, by these Presents will, ordain, and grant, that there be and there hereby is granted, instituted, and established, a College in the Town of Middlebury in the County of Addison in said State:—And that Messrs. Jeremiah Atwater, Nathaniel Chipman, Heman Ball, Elijah Payne, Gamaliel Painter, Israel Smith, Stephen R. Bradley, Seth Storrs, Stephen Jacob, Daniel Chipman, Lot Hall, Aaron Leland, Gershom C. Lyman, Samuel Miller, Jedediah P. Buckingham, and Darius Matthews, shall be an incorporate Society, or Body corporate and politic, and shall hereafter be called and known by the name of the President and Fellows of Middlebury College.—

And that the President of said College with the consent of the Fellows shall have power to give and confer all such honors, degrees, or licenses, as are usually given in Colleges or Universities, upon such as they shall think worthy thereof.

In Testimony whereof I have caused the Public seal of the State of Vermont to be hereunto affixed.

Done at Middlebury this first day of November in the Year of our Lord One thousand and eight hundred, and of the Independence of the United States the twenty-fifth.

By his Excellency's Command

ISAAC TICHENOR.

ROSWELL HOPKINS Secy of State.

Elected.

PRESIDENTS.

Retired.

A. D.

A. D.

1800	REV. JEREMIAH ATWATER, D. D.	1809
1810	REV. HENRY DAVIS, D. D.	1817
1818	REV. JOSHUA BATES, D. D.	1839
1840	REV. BENJAMIN LABAREE, D. D., LL. D.	1866
1866	REV. HARVEY DENISON KITCHEL, D. D.	1873
1875	REV. CALVIN BUTLER HULBERT, D. D.	1880
1880	REV. CYRUS HAMLIN, D. D., LL. D.	1885
1886	EZRA BRAINERD, LL. D.	

CORPORATION.

EZRA BRAINERD, LL. D., *ex officio*, *President*, *Middlebury*.
HON. JOHN W. STEWART, LL. D. *Middlebury*.
RUFUS WAINWRIGHT, Esq., A. M. *Middlebury*.
HON. L. D. ELDREDGE, A. M. *Middlebury*.
HON. JOSEPH BATTELL, A. M. *Middlebury*.
PROF. BRAINERD KELLOGG, LL. D. *Brooklyn, N. Y.*
HON. DAVID K. SIMONDS, A. B. *Manchester*.
REV. CHANDLER N. THOMAS, A. B. *Bristol*.
REV. WILLIAM S. SMART, D. D. *Brandon*.
ERASTUS H. PHELPS, Esq., A. M. *Fair Haven*.
CHARLES M. WILDS, Esq., A. B. *Middlebury*.
HON. JOHN A. MEAD, A. M., M. D. *Rutland*.
HENRY H. VAIL, Esq., LL. D. *New York, N. Y.*
HON. E. B. SHERMAN, LL. D. *Chicago, Ill.*
GEORGE M. WRIGHT, Esq., A. B. *New York, N. Y.*
REV. JAMES L. BARTON, D. D. *Boston, Mass.*
M. ALLEN STARR, M. D., Ph. D., LL. D. . . . *New York, N. Y.*
HON. L. D. ELDREDGE, *Treasurer*.

PRUDENTIAL COMMITTEE.

President BRAINERD, *ex officio*, HON. L. D. ELDREDGE,
HON. JOHN W. STEWART, RUFUS WAINWRIGHT, Esq.,
CHAS. M. WILDS, Esq.

FINANCE COMMITTEE.

HON. JOHN W. STEWART, CHARLES M. WILDS, Esq.,
HON. L. D. ELDREDGE, RUFUS WAINWRIGHT, Esq.,
HON. J. A. MEAD, GEORGE M. WRIGHT, Esq.

FACULTY AND OFFICERS.

EZRA BRAINERD, LL. D., PRESIDENT,
Professor of Mental and Moral Science.

HENRY MARTYN SEELY, A. M., M. D.,
Professor Emeritus of Natural History.

WILLIAM WELLS EATON, A. M.,
Professor of Greek Language and Literature.

WALTER EUGENE HOWARD, LL. D.,
Jermain Professor of Political Science and Professor of History.

CHARLES BAKER WRIGHT, A. M.,
Professor of Rhetoric and English Literature, and Librarian.

MYRON REED SANFORD, A. M.,
Professor of Latin Language and Literature.

WILLIAM WESLEY MCGILTON, A. M.,
Professor of Chemistry.

THEODORE HENCKELS, S. B.,
Morton Professor of Modern Languages.

ERNEST CALVIN BRYANT, S. B.,
Professor of Physics and Mathematics, and Secretary of the
Faculty.

EDWARD ANGUS BURT, Ph. D.,
Burr Professor of Natural History.

CHARLES LESLIE LEONARD, A. B.,
+ Instructor in Elocution.

CHARLES EDWARD PRENTISS, A. M., M. D.,
Assistant Librarian.

STUDENTS.

SENIORS—CLASS OF 1900.

Frederic Henry Allen,	<i>Warehouse Point, Conn.,</i>	* 6 P. H.
William Thomas Barnard,	<i>Granville, N. Y.,</i>	† 31 S. H.
Arthur Edward Batchelder,	<i>Townshend,</i>	Dr. Eddy's.
Samuel Booth Botsford,	<i>Vergennes,</i>	32 S. H.
Herbert Eli Boyce,	<i>Winchendon, Mass.,</i>	9 P. H.
Frederick Howard Bryant,	<i>Lincoln,</i>	7 P. H.
Thomas Alpine Carlson,	<i>Middlebury,</i>	Mr. Carlson's.
Frank Daggett Chatterton,	<i>Proctor,</i>	9 P. H.
Edward Clarendon Hooker,	<i>Marshfield, Mass.,</i>	10 P. H.
Guy Bertram Horton,	<i>No. Clarendon,</i>	7 P. H.
Louis Wellington Severy,	<i>Middlebury,</i>	12 S. H.
John Edward Stetson,	<i>Hanover, Mass.,</i>	10 P. H.
Charles Everett Wheeler,	<i>Sidney, N. Y.,</i>	8 P. H.
Amos Bush Willmarth,	<i>Middlebury,</i>	Mrs. Willmarth's.
Clara Belle Andrews,	<i>Elba, N. Y.,</i>	Battell Hall.
Florence May Andrews,	<i>Elba, N. Y.,</i>	Battell Hall.
Constance Fannie Barker,	<i>Sidney, N. Y.,</i>	Mr. Lee's.
Ethel Bates,	<i>So. Royalston, Mass.,</i>	Mrs. Avery's.
Rena Isobel Bisbee,	<i>Chicopee, Mass.,</i>	Mr. H. Hammond's.
Evelyn Amelia Curtis,	<i>Rockdale, N. Y.,</i>	Mrs. Avery's.
Eveline Loring Dean,	<i>Orange, Mass.,</i>	Mr. O. R. Houghton's.
Florence May Hemenway,	<i>Brattleboro,</i>	Mr. W. E. Wright's.
Sara Vincent Mann,	<i>Rockland, Mass.,</i>	Mr. Towle's.
Frances Elisabeth Nichols,	<i>Norwich,</i>	Mr. H. Hammond's.
Emily Griggs Parker,	<i>West Rutland,</i>	Mrs. Sheldon's.
Alice May Smith,	<i>Hyde Park, Mass.,</i>	Dr. Eddy's.
Beatrice King Taft,	<i>Greenville, N. H.,</i>	Dr. Eddy's.
Winifred Livermore Taft,	<i>Greenville, N. H.,</i>	Dr. Eddy's.
Emma Phyllis Way,	<i>Manchester,</i>	Dr. Eddy's.
Belle Elizabeth Wright,	<i>New Haven,</i>	Mr. Merrill's.

* Abbreviation for Painter Hall.

† Abbreviation for Starr Hall.

JUNIORS—CLASS OF 1901.

Fred John Bailey,	<i>Wells River,</i>	30 S. H.
Walter Mason Barnard,	<i>Granville, N. Y.,</i>	31 S. H.
Lemuel Ransom Brown,	<i>Potsdam, N. Y.,</i>	Mrs. D. C. Wright's.
Reid Langdon Carr,	<i>Middlebury,</i>	Mr. A. K. Carr's.
David Flagg Clark,	<i>Cedar Rapids, Ia.,</i>	24 S. H.
Ellsworth Colonel Lawrence,	<i>Monkton Ridge,</i>	11 S. H.
Allen Henry Nelson,	<i>East Middlebury,</i>	Mrs. A. N. Warner's.
John Earle Parker,	<i>West Rutland,</i>	29 S. H.
Burt Linus Stafford,	<i>Tinmouth,</i>	29 S. H.
Roy Sumner Stearns,	<i>Bristol,</i>	16 S. H.
Henry Charles Tong,	<i>New Haven,</i>	28 S. H.
Glenn William White,	<i>Ludlow,</i>	Mrs. A. N. Warner's.

Rena Ellen Avery,	<i>Middlebury,</i>	Mrs. Avery's.
Agnes Alzetta Boardman,	<i>East Middlebury,</i>	Mrs. W. H. Matthews's.
Alice Warren Brooks,	<i>Worcester, Mass.,</i>	Battell Hall.
Nellie Irene Button,	<i>Rutland,</i>	Mr. W. E. Wright's.
Cecile Maud Child,	<i>Weybridge,</i>	Mr. Clay's.
Gertrude Ella Cornish,	<i>Worcester, Mass.,</i>	Battell Hall.
Dorothy Mary Graves,	<i>Vergennes,</i>	Mr. Towle's.
Nellie Maria Hadley,	<i>East Faffrey, N. H.,</i>	Mr. Jackson's.
Grace Elizabeth James,	<i>Weybridge,</i>	Mr. J. A. James's.
Laura Ellah Jarvis,	<i>Worcester, Mass.,</i>	Battell Hall.
Charlotte May Johnson,	<i>West Brattleboro,</i>	Mr. W. E. Wright's.
Marianne Frances Landon,	<i>New Haven,</i>	Mr. H. Hammond's.
Fannie Electa Smith,	<i>Worcester, Mass.,</i>	Mr. Lee's.
Lena Berniece Thomas,	<i>Middlebury,</i>	Mr. E. H. Thomas's.
Florence Judith Walker,	<i>Pembroke, N. H.,</i>	Mr. H. Hammond's.
Mildred Abbie Weld,	<i>New Haven,</i>	Mr. Towle's.

SOPHOMORES—CLASS OF 1902.

David Arthur Burke,	<i>Port Henry, N. Y.,</i>	Mr. Burke's.
Orvis K. Collins,	<i>Ferrisburg,</i>	27 S. H.
George Rufus Drake,	<i>Bristol,</i>	13 S. H.
John Reginald Duffield,	<i>Port Henry, N. Y.,</i>	Mr. P. Billings's.

Frederick Arthur Hughes,	<i>Middlebury,</i>	Mr. Hughes's.
Robert William McCuen,	<i>Vergennes,</i>	15 S. H.
Frederick Bingham Miner,	<i>Bridport,</i>	21 S. H.
Gilbert Waldo Roberts,	<i>New York, N. Y.,</i>	16 S. H.
Charles Louis Seiple,	<i>Vergennes,</i>	13 S. H.
Archie Chester Sheldon,	<i>East Middlebury,</i>	25 S. H.
Fay Alton Simmons,	<i>Dorset,</i>	Mrs. E. H. Higley's.
Wilfred Judson Stone,	<i>Vergennes,</i>	27 S. H.
John Everett Thompson,	<i>Tarrytown, N. Y.,</i>	10 S. H.
Charles Arthur Voetsch,	<i>New Haven,</i>	26 S. H.
Julius Abner Wilcox,	<i>Crown Point, N. Y.,</i>	25 S. H.
Percival Wilds,	<i>Middlebury,</i>	14 S. H.
Nellie Eastwood Baker,	<i>Van Deusen, Mass.,</i>	Battell Hall.
Edith Florence Barrett,	<i>Manchester Center,</i>	Mr. H. Hammond's.
Elizabeth Bowles,	<i>Middlebury,</i>	Mrs. A. F. Langworthy's.
Bertha Ruth Collins,	<i>Ferrisburg,</i>	Mr. W. E. Wright's.
Anna Keese Deuel,	<i>Millbrook, N. Y.,</i>	Mr. Towle's.
Ruth Sophia Murdoch,	<i>Akron, O.,</i>	Battell Hall.
Mabel Allard Ryder,	<i>New Haven,</i>	Mr. Merrill's.
Elizabeth Augusta Williams,	<i>Poultney,</i>	Battell Hall.

FRESHMEN—CLASS OF 1903.

Charles Warren Allen,	<i>Vergennes,</i>	8 S. H.
Elbert Sidney Brigham,	<i>St. Albans,</i>	Mr. E. H. Thomas's.
William John Darnell,	<i>Batavia, N. Y.,</i>	28 S. H.
Burton Blakeslee Dimmock,	<i>West Cornwall,</i>	22 S. H.
Mortimer Vincent Drake,	<i>Ticonderoga, N. Y.,</i>	5 S. H.
Henry Franklin Harvey,	<i>Bristol,</i>	Miss M. Fuller's.
James Hovey,	<i>New York, N. Y.,</i>	10 S. H.
Frank Richmond Ingalsbe,	<i>Oakfield, N. Y.,</i>	32 S. H.
Claud Frederick Lester,	<i>Ticonderoga, N. Y.,</i>	26 S. H.
Ledlie Dominick Moore,	<i>Chatham, N. Y.,</i>	7 S. H.
James Ira Newton,	<i>Sidney, N. Y.,</i>	8 P. H.
Learned Ray Noble,	<i>Tinmouth,</i>	24 S. H.
Wilberforce Ogden,	<i>Chatham, N. Y.,</i>	7 S. H.

Arthur Sylvester Richardson,	<i>Marlboro, Mass.,</i>	30 S. H.
Duane Leroy Robinson,	<i>Streetroad, N. Y.,</i>	5 S. H.
George William Skeels,	<i>Swanton,</i>	Mrs. Wells's.
Louie Clare Squire,	<i>Council Bluffs, Iowa,</i>	9 S. H.
Charles Preston Stubbs,	<i>Macon, Ga.,</i>	6 S. H.
Albert Edson Taylor,	<i>Louisville Landing, N. Y.,</i>	12 S. H.
Ralph Waldo Thompson,	<i>Weybridge,</i>	Mr. Thompson's.
Joseph Thurlow Weed,	<i>Ticonderoga, N. Y.,</i>	21 S. H.
Garfield Minot Weld,	<i>New Haven,</i>	6 P. H.
Charles Whitney,	<i>East Franklin,</i>	Mr. E. H. Thomas's.
Albert Edwin Witherell,	<i>Cornwall,</i>	22 S. H.
James Maynard Wright,	<i>No. Hartland,</i>	Mr. T. P. D. Matthews's.
Mabel Anne Howe Baker,	<i>Rutland,</i>	Mr. Merrill's.
Lena Mae Bixby,	<i>Springfield,</i>	Prof. Boyce's.
Katherine Clarissa Bugbee,	<i>Athol, Mass.,</i>	Mr. F. A. Bond's.
Carrie Mason Burditt,	<i>Pittsford,</i>	Dr. Eddy's.
Mary Newton Dean,	<i>Ferrisburg,</i>	Battell Hall.
Leila Frances Dustin,	<i>Malone, N. Y.,</i>	Battell Hall.
Amelia Elizabeth Hausman,	<i>E. Northfield, Mass.,</i>	Mr. W. E. Wright's.
Anna Sarah Hazen,	<i>East Wallingford,</i>	Mr. Merrill's.
Lottie Mae Hull,	<i>Napa, Cal.,</i>	Mrs. Avery's.
Bertha Mabel Kelsey,	<i>Salisbury,</i>	Mrs. M. J. Foote's.
Margaret Jane Mathison,	<i>Littleton, N. H.,</i>	Mr. Towle's.
Mary Eva Munsey,	<i>Suncook, N. H.,</i>	Mr. H. Hammond's.
Elizabeth May Salisbury,	<i>Maynard, Mass.,</i>	Mr. Merrill's.
Maude Winifred Smith,	<i>Middlebury,</i>	Mrs. O. Smith's.
Rachel Josephine Spaulding,	<i>Jaffrey, N. H.,</i>	Mr. W. E. Wright's.
Ethel Garfield Thompson,	<i>Gilbertville, Mass.,</i>	Battell Hall.

SUMMARY.

Seniors	30
Juniors	28
Sophomores	24
Freshmen	41
Total	123

TERMS OF ADMISSION.

Two courses are offered in the College curriculum, the Classical, leading to the degree of A. B., and the Latin-Scientific, leading to the degree of B. S.

ADMISSION BY EXAMINATION.

CLASSICAL COURSE.—The requirements for admission to the Freshman Class in the Classical Course are as follows:

LATIN.*

I. ELEMENTARY.¹

The Elementary Examination will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *three* school years. It will consist of two parts (which, however, cannot be taken separately):

- (a) The translation at sight of simple Latin prose and verse;
- (b) A thorough examination on Cicero's Orations against Catiline, II., III., and IV., directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Latin prose, involving the use of such words, constructions, and idioms only, as occur in the speeches prescribed.

II. ADVANCED.

The Advanced Examinations will be adapted to the proficiency of those who have studied Latin in a systematic course of five lessons a week, extending through at least *four* school years. The examinations may be taken separately:

- 1. The translation at sight of passages of Latin prose and verse, with questions on ordinary forms, constructions, and idioms, and on prosody.
- 2. An examination consisting of translation and questions on the subject-matter of Vergil's *Æneid*, Books I.-V.

*The requirements in Latin and Greek are those recommended by the Commission of Colleges in New England on Admission Examinations.

¹The Examination is divided into Elementary and Advanced, so that, if desired, it may be taken in different years.

3. The translation into Latin prose of a passage of connected English narrative. The passage set for translation will be based on some portion of the Latin prose works usually read in preparation for college, and will be limited to the subject-matter of those works.

GREEK.

I. ELEMENTARY.

The Elementary Examination will be adapted to the proficiency of those who, in addition to the course defined as suitable preparation for the Elementary Examination in Latin, have studied Greek in a systematic course of five exercises a week, extending through at least *two* school years. It will consist of two parts (which, however, cannot be taken separately):

(a) The translation at sight of passages of simple Attic prose.

(b) A thorough examination on Xenophon's *Anabasis*, Book II., directed to testing the candidate's mastery of the ordinary forms, constructions, and idioms of the language; the test to consist, in part, of writing simple Attic prose, involving the use of such words, constructions, and idioms only, as occur in the portion of Xenophon prescribed.

II. ADVANCED.

The Advanced Examinations will be adapted to the proficiency of those who, in addition to the course defined as a suitable preparation for the Advanced Examinations in Latin have studied Greek in a systematic course of five exercises a week, extending through at least *three* school years. The examinations may be taken separately:

1. The translation at sight of passages of Attic prose and of Homer; with questions on ordinary forms, constructions, and idioms, and on prosody.

2. An examination consisting of translation and questions on the subject-matter of Homer's *Iliad*, Books I. and II., 1-493.

3. The translation into Attic prose of a passage of connected English narrative. The passage set for translation will be based on some portion of the Greek prose works usually read in preparation for college, and will be limited to the subject-matter of those works.

For the guidance of teachers, the College presents the following Preparatory Courses proposed by the Commission of Colleges in New England on Admission Examinations. It is not the intention to prescribe these courses, but merely to show how the proper preparation for the above requirements can be made.

LATIN.

FIRST YEAR—Five lessons a week.

First and Second Terms: Introductory Lessons.

Third Term: Easy reading, such as Fables, Viri Romæ, Eutropius, etc., (15 to 25 pages¹).

Practice in reading at sight² and in writing Latin. Systematic study of grammar begun.

SECOND YEAR—Five lessons a week.

First Term: Easy reading continued (15 to 25 pages). Nepos or Cæsar (15 to 20 pages).

Second Term: Cæsar (30 to 40 pages).

Third Term: Ovid's Metamorphoses (750 to 1000 lines).

Practice in reading at sight and in writing Latin, with systematic study of grammar, throughout the year.

THIRD YEAR—Five lessons a week.

First Term: Vergil's Æneid (750 to 1000 lines). Cicero against Catiline, I. and II. (23 pages). Practice in reading at sight and in writing Latin. Grammar.

Second and Third Terms: Cicero against Catiline, III. and IV., (22½ pages). Cæsar (45 to 60 pages) and Ovid (500 to 750 lines), mainly for practice in reading at sight. Thorough grammatical review and practice in writing Latin, both based on study of Cicero against Catiline, II.-IV.

FOURTH YEAR—Five lessons a week.

Cicero (45 to 60 pages). Vergil (4000 to 6000 lines). Practice in reading at sight and in writing Latin. Grammar.

GREEK.

FIRST YEAR—Five lessons a week.

First and Second Terms: Introductory Lessons.

Third Term: Xenophon's Anabasis (20 to 30 pages). Practice in reading at sight and in writing Greek. Systematic study of grammar begun.

SECOND YEAR—Five lessons a week.

Xenophon's Anabasis (continued), either alone or with other Attic prose (85 to 120 pages).

Practice in reading at sight. Systematic study of grammar. Thorough grammatical review and practice in writing Greek, both based on study of Book II. of the Anabasis.

THIRD YEAR—Five lessons a week.

Homer (2500 to 5000 lines). Attic prose, with practice in writing Greek (25 to 40 pages). Grammar. Practice in reading at sight.

¹Teubner pages are the standard.

²"Reading at sight" is used in these programmes as a convenient phrase to denote the reading of Latin or Greek, with understanding of the sense, independently of or preliminary to the formal rendering into idiomatic English; and by "practice in reading at sight" is meant not merely the translation of unprepared passages in class, but the inculcation of correct methods of reading, to be used by the pupil in preparing assigned passages as well.

HISTORY.

History of Rome (Allen's Short History of the Roman People or Creighton's Primer will indicate the amount required). History of Greece to the death of Alexander.

GEOGRAPHY.

Ancient and Modern Geography.

MATHEMATICS.

Arithmetic, including the Metric system; Algebra, through Quadratic Equations; Plane Geometry, five books.

ENGLISH.

The requirements recommended by the Commission of Colleges in New England on Admission Examinations.

Note.—No candidate will be accepted in English whose work is notably deficient in point of spelling, punctuation, idiom, or division into paragraphs.

1. *Reading and Practice.*—A limited number of books will be set for reading. The candidate will be required to present evidence of a general knowledge of the subject-matter, and to answer simple questions on the lives of the authors. The form of examination will usually be the writing of a paragraph or two on each of several topics, to be chosen by the candidate from a considerable number—perhaps ten or fifteen—set before him in the examination paper. The treatment of these topics is designed to test the candidate's power of clear and accurate expression, and will call for only a general knowledge of the substance of the books. In place of a part or the whole of this test, the candidate may present an exercise book, properly certified by his instructor, containing compositions or other written work done in connection with the reading of the books.

The books set for this part of the examination will be:

1900—Dryden's *Palamon and Arcite*; Pope's *Iliad*, Books I., VI., XXII., and XXIV.; *The Sir Roger de Coverley Papers in The Spectator*; Goldsmith's *The Vicar of Wakefield*; De Quincey's *The Flight of a Tartar Tribe*; Cooper's *The Last of the Mohicans*; Lowell's *The Vision of Sir Launfal*; Scott's *Ivanhoe*; Tennyson's *The Princess*.

1901—George Eliot's *Silas Marner*; Pope's *Iliad*, Books I., VI., XXII., and XXIV.; *The Sir Roger de Coverley Papers in The Spectator*; Goldsmith's *The Vicar of Wakefield*; Scott's *Ivanhoe*;

Shakespeare's *The Merchant of Venice*; Cooper's *The Last of the Mohicans*; Tennyson's *The Princess*; Coleridge's *The Ancient Mariner*.

1902—George Eliot's *Silas Marner*; Pope's *Iliad*, Books I., VI., XXII., and XXIV.; *The Sir Roger de Coverley Papers* in *The Spectator*; Goldsmith's *The Vicar of Wakefield*; Scott's *Ivanhoe*; Shakespeare's *The Merchant of Venice*; Cooper's *The Last of the Mohicans*; Tennyson's *The Princess*; Coleridge's *The Ancient Mariner*.

2. *Study and Practice*.—This part of the examination presupposes a more careful study of each of the works named below. The examination will be upon subject-matter, form, and structure, and will also test the candidate's ability to express his knowledge with clearness and accuracy. The books set for this part of the examination will be:

1900—Shakespeare's *Macbeth*; Milton's *Paradise Lost*, Books I. and II.; Burke's *Speech on Conciliation with America*; Macaulay's *Essays on Milton and Addison*.

1901—Shakespeare's *Macbeth*; Milton's *L'Allegro, Il Penseroso, Comus*, and *Lycidas*; Burke's *Speech on Conciliation with America*; Macaulay's *Essays on Addison and Milton*.

1902—Same as 1901.

LATIN-SCIENTIFIC COURSE.—Candidates for the Latin-Scientific Course are examined in the same studies with the exception of the Greek and Greek History, in place of which are the following requirements:

HISTORY AND LITERATURE.

ENGLISH HISTORY.—Such a knowledge as may be secured by a thorough study of a work like Montgomery's.

AMERICAN HISTORY.—Johnston's will indicate the amount required.

AMERICAN LITERATURE.—Richardson's *Primer* will be regarded as satisfactory.

FRENCH AND GERMAN.

Candidates will be examined in either French or German, as follows:

FRENCH 1.—Ability to translate simple prose at sight. For this purpose at least one hundred and fifty pages of text should be read. Such books as Ludovic Halévy's *L'Abbé Constantin*; George Sand's *La Mare au Diable*; van Daell's *Introduction to French Authors* are suggested.

FRENCH 2.—Proficiency in the elements of grammar. Whitney's French Grammar, Part I., will indicate the amount required.

GERMAN 1.—Ability to translate simple prose at sight. For this purpose at least one hundred pages of text should be read. Such books as Volkmann's *Kleine Geschichten*; Schiller's *Der Neffe als Onkel*; Bernhardt's *Noveletten Bibliothek*, Vols. I. and II., are suggested.

GERMAN 2.—Proficiency in the elements of grammar. Whitney's Brief German Grammar will indicate the amount required.

ADMISSION BY CERTIFICATE.

Students from such fitting schools as have thorough courses fully meeting the above requirements will be admitted without examination, on the certificate of their respective principals that they have completed the following courses in Latin and Greek, and all the others mentioned above, and have mastered all that is required for admission:

LATIN.

Cæsar's Gallic War, Books I.—III., and 50 additional pages of Cæsar, Nepos, Eutropius, or other easy Latin.

Cicero's Orations against Catiline and the Manilian Law, and 12 additional pages of Cicero.

Vergil's *Æneid*, Books I.-V., and 900 additional lines of Vergil or Ovid.

Latin Composition (Collar's Practical Latin Composition, Part I. or III., or Jones's Latin Composition, Chapters I.-XXXIV., will indicate the amount required).

GREEK.

Xenophon's *Anabasis*, Books I.-III., and 35 additional pages of Attic prose.

Homer's *Iliad*, Books I. and II., 1-493; and 450 additional lines of Homer.

Greek Composition (Woodruff's Greek Prose Composition will indicate the amount required).

Real equivalents will be accepted in place of any of the Latin and Greek authors named.

Blank certificates for both courses will be forwarded on application. Those received on certificate will be regarded as on probation during the first term.

Students may be admitted to advanced standing, provided that in addition to the requisites for admission to the Freshman class they are found on examination thoroughly acquainted with all the studies that have been pursued by the class they purpose to join.

Candidates for such standing should, however, be informed that in consequence of the thorough discipline and the exactness of knowledge that is required of the student, no one can hope, if admitted, to maintain a respectable standing, unless he comes with a high degree of preparation. Indeed, it is very important for the unity and completeness of a liberal education that the students enter college at the commencement of the course. The disadvantages incurred by those who postpone an entrance to a later period are much more serious than is commonly supposed.

Every student admitted to an advanced standing (with the exception of those who come from other colleges) is re-

quired to pay a fee of \$5.00, if he enters after the expiration of the Fall term of the Freshman year; and \$10.00, if after the expiration of the Fall term of the Sophomore year.

Candidates for admission must bring certificates of good moral character; and if from another college, of their regular dismission and good standing. When a student has been examined and admitted to college, he is required to attend the prescribed exercises, and is subject to the laws of the institution.

The educational privileges of the college are open to young women.

COURSES OF INSTRUCTION.

The courses of instruction are of two kinds, required and elective, but each student is required to have at least fifteen hours of recitation a week. All the studies of Freshman and Sophomore years are prescribed. In the Junior and Senior years, nine and six hours a week respectively are prescribed, the studies for the remaining hours being selected by the student from the elective courses offered, subject to the following regulations of the Faculty:

A student may elect any course offered to a class below his own, and not already taken by him, if such choice is approved by the President and the instructor in that course. No student will be allowed to take any study in advance of his class.

A student may elect one extra course, which must be pursued under the same conditions as his regular courses, and may be counted for honors, but will not be considered in determining his rank. No course, however, can be taken as an extra until a written request has been granted by the Faculty.

Each student is required to give notice in writing to the Secretary of the Faculty of his choice of elective studies for any term no later than the last Friday of the preceding term. Any student failing to comply with this rule will be assigned to such courses as the Faculty may select.

The following table shows the number of hours of required and elective work in each department in the Classical Course:

	Required	Elective
Greek	266	228
Latin	266	228
English	228	186
German	114	228
French	—	186
Philosophy	114	114
Logic	42	—
Pedagogy	—	72
History	72	228
Political Science	114	264
Mathematics	152	114
Astronomy	—	42
Physics	114	144
Chemistry	114	114
Natural History	114	192

Students in the Latin-Scientific Course have, in place of Greek, German 152 hours and Natural History 114 hours.

CLASSICAL COURSE.

FRESHMAN YEAR.

FALL TERM—THIRTEEN WEEKS.

Greek.—Selections from Xenophon's *Memorabilia*. Greek Composition Exercises based on the Xenophon. The work of this term is designed as a review of grammatical forms and of syntax. Four hours a week.

PROFESSOR EATON.

Latin.—Test exercises in vocabulary and inflection, particularly practice in handling verb forms. During the term about twenty-five hours are given to a thorough review of the elementary principles of Latin writing, concluding with the study of the development and use of Cases. Written prose exercises, based upon Livy, are required

weekly. Selections from Livy, Books I. and XXI., supplemented by sight passages from various authors, are assigned for translation. Four hours a week.

PROFESSOR SANFORD.

Rhetoric.—A familiarity with the general principles of rhetoric being assumed, the work is divided between practical composition and a study of the art on the basis of its philosophy. The criticism of work submitted is conducted with each student individually, and the exercises are progressive throughout the year. Three hours a week.

PROFESSOR WRIGHT.

Mathematics.—Phillips and Fisher's Solid Geometry. Four hours a week.

PROFESSOR BRYANT.

WINTER TERM—TWELVE WEEKS.

Greek.—Select Orations of Lysias. A brief study of legal procedure and of the characteristics of Lysias as an orator is made. The formation of the verb receives special attention. Four hours a week.

PROFESSOR EATON.

Latin.—Weekly exercises in prose deal largely with the subject of the development, history, and use of Mood. Livy, Book XXII., with sight reading from Quintus Curtius, Nepos, and others. The objects sought are fluency of rendering and correctness in the use of English-Latin and Latin-English synonyms. Four hours a week.

PROFESSOR SANFORD.

Rhetoric.—A continuation of the work of the Fall term. Three hours a week.

PROFESSOR WRIGHT.

Mathematics.—Hall and Knight's Elementary Algebra. Four hours a week.

PROFESSOR BRYANT.

SPRING TERM—TWELVE WEEKS.

Greek.—Homer, Odyssey, Books XIII., XIV., XV. The place of the Homeric writings in literature and their language and style are studied. Lectures upon the Monuments of Athens, illustrated with lantern slides. Four hours a week.

PROFESSOR EATON.

Latin.—Weekly exercises in prose; topics: Indirect Discourse and the Periodic Structure. Selections from the Philosophical Treatises and Letters of Cicero. An outline of history as far as through the twelve Cæsars is studied to determine the place of Rome as related to contemporaneous nations. Special topics from the historians are assigned for library reading. Four hours a week.

PROFESSOR SANFORD

Rhetoric.—A continuation of the work of the Fall and Winter terms. Three hours a week. PROFESSOR WRIGHT.

Mathematics.—Phillips and Strong's Plane and Spherical Trigonometry. Four hours a week. PROFESSOR BRYANT.

SOPHOMORE YEAR.

FALL TERM—THIRTEEN WEEKS.

Greek.—Euripides, Iphigenia among the Taurians; Jebb's Greek Literature, the Drama. Lectures on the Attic Theater. Three hours a week. PROFESSOR EATON.

Latin.—Prose exercises; Periodic Structure (continued), with exercises in dictation and analysis of sentences in Tacitus and Cicero. Germania and Agricola of Tacitus. Outline of the history of the later Empire, with brief investigation of the subject of the influence of Rome upon the Northern tribes. Library reading and the study of photographs of Roman remains in Germany and England. Three hours a week. PROFESSOR SANFORD.

German.—Edgren and Fossler's German Grammar. Volkmann, Kleine Geschichten. Thorough pronunciation is emphasized from the beginning; easy poems and connected prose extracts, illustrative of the principles of language structure, are committed to memory and recited in class. Conversation in easy German is one of the main features of the daily recitations. Three hours a week.

PROFESSOR HENCKELS.

Physics.—Fundamental units of measurement, Kinematics, Dynamics, Work and Energy. Properties of matter. Molecular forces. Three hours a week.

PROFESSOR BRYANT.

Zoology.—Lectures with supplementary reading in Hertwig's Principles of Zoology. Two hours and one period of laboratory work a week on Invertebrates.

PROFESSOR BURT.

WINTER TERM—TWELVE WEEKS.

Greek.—Thucydides, Book VII. The place of Thucydides in the development of prose and his characteristics as an historian are studied. Three hours a week.

PROFESSOR EATON.

Latin.—Selected Odes and Epodes of Horace. By comparison with other poets particular attention is given to the literary study of the verse. Lectures on the private life of the Romans and on Myth-

ology, illustrated with photographs and lantern slides. Very careful preparation of note books is required. Three hours a week.

PROFESSOR SANFORD.

German.—Grammar. Schiller, *Der Neffe als Onkel*. Baumbach, *Der Schwiegersohn*. Poems and prose extracts committed to memory; easy conversation. Three hours a week.

PROFESSOR HENCKELS.

Civil Government.—American Constitutional History and Law. History of the development of American political institutions, study of colonial charters, examination of leagues and confederations, history of the formation and adoption of the Federal Constitution, including a careful study of the text. Recitations, supplemented by lectures and library work. Three hours a week.

PROFESSOR HOWARD.

Physics.—Density. Sound: speed, energy, reflection, refraction, and interference of sound waves. Heat: temperature, calorimetry, fusion, vaporization, thermo-dynamics. Three hours a week.

PROFESSOR BRYANT.

SPRING TERM—TWELVE WEEKS.

Greek.—Plato, Selections from the *Apology*, *Crito*, and *Phædo*. A brief study of the life and character of Socrates is made. Mahaffy's *Old Greek Life*. Lectures are given, illustrated with lantern slides. Three hours a week.

PROFESSOR EATON.

Latin.—Dictation exercises, Etymology, and the study of early Latin forms (Allen, Wilmann, Wordsworth). The *Trinummus* of Plautus with lectures and library reading on the subject of the Roman Theater. Three hours a week.

PROFESSOR SANFORD.

German.—Grammar. *Noveletten Bibliothek*, Vol. I.; Harris's *German Composition*; committing to memory. From the beginning of this term, German will be as far as possible the medium of communication in the class-room throughout the course. Three hours a week.

PROFESSOR HENCKELS.

Physics.—Light: reflection, refraction, interference, diffraction, and polarization of light waves, and spectrum analysis. Electricity: electrostatic induction and potential, electrostatic machines, electrical units and measurements, magnetic induction and potential, electro-magnetic induction, dynamo-electric machines. Three hours a week.

PROFESSOR BRYANT.

Botany.—Gray's Lessons; preparation of herbarium specimens; lectures. Two hours and one period of laboratory work a week.

PROFESSOR BURT.

JUNIOR YEAR.

FALL TERM—THIRTEEN WEEKS.

REQUIRED STUDIES:

English Literature.—A study of literary types in prose and verse; lectures. Three hours a week.

PROFESSOR WRIGHT.

Logic.—Jevons's. Three hours a week.

PROFESSOR WRIGHT.

Chemistry.—Roscoe; lectures. A study is made of the non-metallic elements and their principal compounds and of their relation to the metals. Acids, bases, and salts are studied carefully and their formation illustrated. Numerous chemical problems involving atomic and molecular weights, percentage composition, etc., are solved by the student. Three hours a week.

PROFESSOR MCGILTON.

ELECTIVE STUDIES:

Greek.—Selections from Attic Orators. Lectures on the Origin and Development of Attic Oratory and the characteristics of the earlier orators. Three hours a week.

PROFESSOR EATON.

Latin Composition.—Advanced work in Grammar and Prose Composition. Discussion of methods of teaching Latin and examination of text-books used in preparatory work. (A course designed particularly for those intending to teach.) Three hours a week.

PROFESSOR SANFORD.

Roman Archaeology.—Lectures on the Topography of Italy and the Buildings and Statuary of Ancient Rome. Readings on various topics from Middleton, Lanciani, Burn, Schreiber, and the journals are required, with careful preparation of note books. Photographs and stereopticon views. (The course is intended as a background for the study of Advanced Latin, and should be elected by all those intending to pursue the subject further.) Three hours a week.

[To be given in 1900-1901.]

PROFESSOR SANFORD.

German.—Goethe, Goetz von Berlichingen. Modern German Lyrics. Advanced Grammar. Von Jagemann's German Composition. Three hours a week.

PROFESSOR HENCKELS.

Political Institutions.—The State. Elements of historical and practical politics. This course treats of the philosophy and historic development of government. It includes an examination of the governments of Greece and Rome and of the Teutonic system, and is designed to lay a foundation for the subsequent study of law and political science. Recitations and lectures. Three hours a week.

PROFESSOR HOWARD.

History.—Modern Europe. Three hours a week.

PROFESSOR HOWARD.

Mathematics.—Wentworth's Analytical Geometry. Three hours a week.

PROFESSOR BRYANT.

Botany.—Histology and Physiology of Plants. Strasburger's Text-book of Botany; lectures and laboratory work. Three periods a week.

[To be given in 1900-1901; this year's course the same as the Senior elective.]

PROFESSOR BURT.

WINTER TERM—TWELVE WEEKS.

REQUIRED STUDIES:

English Literature.—A study of literary types (continued); lectures. Three hours a week.

PROFESSOR WRIGHT.

History.—Emerton's Mediæval Europe; lectures. Three hours a week.

PROFESSOR HOWARD.

Chemistry.—Roscoe; Jones's Junior Course; lectures. By means of the study of the preceding term, the student is able, at his own desk and with his own apparatus, to manufacture the most important chemical compounds and to isolate the principal elements. Full notes are kept by him of each step taken and of each observation made, and frequent reports are presented to the instructor. Three hours a week, or three periods a week of laboratory work.

PROFESSOR MCGILTON.

ELECTIVE STUDIES:

Greek.—Demosthenes, Philippics. Attention is given to Demosthenes as an orator. Three hours a week.

PROFESSOR EATON.

Latin.—Terence: the translation of the Adelphi, with brief readings from all the other plays. Selections from Seneca and the later tragedians. Three hours a week. PROFESSOR SANFORD.

Latin.—Selections from the Letters of Pliny (Platner), with sight reading from Cicero. The course is intended to give practice in rapid reading. Three hours a week.

[To be given in 1900-1901.]

PROFESSOR SANFORD.

Old English.—A brief study of Old English Grammar preliminary to the work in Chaucer offered in the Spring term. Three hours a week.

PROFESSOR WRIGHT.

German.—Modern German Lyrics (continued). Wilbrandt, Der Meister von Palmyra. Advanced Grammar and Composition (continued). Three hours a week.

PROFESSOR HENCKELS.

French.—Grammar: Chardenal's Complete French Course. Reading: Thiers, Napoléon en Egypte; About, Les Mariages de Paris. Three hours a week.

PROFESSOR HENCKELS.

Political Institutions.—The State (continued). A brief treatment of the political history of England, Germany, France, and other European countries and a careful examination of their present constitutions. Recitations, lectures, and library work. Three hours a week.

PROFESSOR HOWARD.

History.—The Puritan Revolution. Three hours a week.

PROFESSOR HOWARD.

Mathematics.—Osborne's Differential Calculus. Three hours a week.

PROFESSOR BRYANT.

Physics.—Heat and Light. The measurement of heat, its mechanical equivalent, its manifestation in the temperature, expansion, and change of state of matter, and its transmission form the basis of the work in heat. In the study of light are considered its velocity, reflection, refraction, and polarization, and spectrum analysis. The work is supplemented by lectures illustrated with laboratory experiments. Three hours a week.

PROFESSOR BRYANT.

Botany.—Histology and Physiology of Plants (continued). Strasburger's Text-book of Botany; lectures and laboratory work. Three periods a week.

[To be given in 1900-1901; this year's course the same as the Senior elective.]

PROFESSOR BURT.

SPRING TERM—TWELVE WEEKS.

REQUIRED STUDIES:

Rhetoric.—The work in this course is confined to a consideration of the principles of argumentative composition, Whately being used as a text-book. Three hours a week. PROFESSOR WRIGHT.

History.—Emerton's Mediæval Europe (continued); lectures. Students are required to prepare papers upon assigned subjects. Three hours a week. PROFESSOR HOWARD.

Chemistry.—Roscoe (continued); lectures. The work of this term is mainly laboratory work, the special subject being the study of the metals, their properties and principal compounds. The student is led to recognize individual metals in their compounds by characteristic reactions and also constructs groupings of the metals with reference to their conduct toward various group reagents. All this work is preparatory to Qualitative Analysis. Three periods a week. PROFESSOR MCGILTON.

ELECTIVE STUDIES:

Greek.—Greek Composition. Three hours a week.

PROFESSOR EATON.

Latin.—A study in the Decline of Latin Literature. Selections from Apuleius, Ausonius, Prudentius, Patristic Latin, and the Hymnology of the early Church. The Latin of the Middle Ages. Three hours a week. PROFESSOR SANFORD.

English Literature.—Chaucer. This course is open only to those electing the Old English work of the Winter term. Three hours a week. PROFESSOR WRIGHT.

German.—Goethe, Faust, Part I. Keller's Bilder aus der Deutschen Literatur is used for rapid reading in class. Advanced Grammar and Composition, (continued). Three hours a week.

PROFESSOR HENCKELS.

French.—Grammar (completed). Reading: Daudet, Trois Contes Choisis; de Musset, Histoire d'un Merle Blanc; Corneille, Le Cid. Three hours a week. PROFESSOR HENCKELS.

Elements of Jurisprudence.—This course is especially intended for students who purpose entering the legal profession, and is designed to give a survey of the science and to make the student familiar with its literature and terminology. It consists of a general

view of the Roman and Common Law and an examination of the history of both of these systems and their fundamental ideas. Three hours a week.

PROFESSOR HOWARD.

History.—The French Revolution. Three hours a week.

PROFESSOR HOWARD.

Mathematics.—Osborne's Integral Calculus, Three hours a week.

PROFESSOR BRYANT.

Physics.—Heat and Light (continued). Three hours a week.

PROFESSOR BRYANT.

SENIOR YEAR.

FALL TERM—THIRTEEN WEEKS.

REQUIRED STUDIES:

Psychology.—Study of the Human Intellect, embracing Sensation, Perception, Memory, Imagination, and Thought. Recitations from the first half of Sully's Outlines of Psychology; lectures and discussions. Three hours a week.

PRESIDENT BRAINERD.

Economics.—Walker's Political Economy, Advanced Course. Production, Exchange, Distribution, and Consumption are studied, the object being to give the student a knowledge of general principles. Recitations, lectures and discussions. Three hours a week.

PROFESSOR HOWARD.

ELECTIVE STUDIES:

Greek.—Study of the Œdipus Legend; Sophocles, Œdipus the King; Sophocles's Œdipus at Colonus, Æschylus's Seven against Thebes, and Euripides's Phœnissæ are read in English. Three hours a week.

[To be given in 1900-1901; this year's course the same as the Junior elective.]

PROFESSOR EATON.

Latin Composition.—Advanced work in Grammar and Prose Composition. Discussion of methods of teaching Latin and examination of text-books used in preparatory work. (A course designed particularly for those intending to teach.) Three hours a week.

PROFESSOR SANFORD.

Roman Archæology.—Lectures on the Topography of Italy and the Buildings and Statuary of Ancient Rome. Readings on various

topics from Middleton, Lanciani, Burn, Schreiber, and the journals are required, with careful preparation of note books. Photographs and stereopticon views. (The course is intended as a background for the study of advanced Latin, and should be elected by all those intending to pursue the subject further.) Three hours a week.

[To be given in 1900-1901.]

PROFESSOR SANFORD.

English Literature.—American Literature. An examination of typical American prose; lectures. Three hours a week.

PROFESSOR WRIGHT.

German.—Goethe, Torquato Tasso. Stern's Studien und Plaudereien. Von Jagemann's German Composition (continued). Three hours a week.

PROFESSOR HENCKELS.

French.—Fortier's Histoire de la Littérature Française. Grandgent's French Composition. Racine, Andromaque. Three hours a week.

PROFESSOR HENCKELS.

Physiological Psychology.—Ladd's Outlines. Recitations and experiments; examination and dissection of the nervous system of animals. Study of prepared slides and models illustrating the human brain and spinal cord. Three hours a week.

PRESIDENT BRAINERD.

Constitutional Law.—Cooley's Principles of Constitutional Law. Critical study of the United States Constitution. This course is a continuation of the Junior elective. It traces the growth of English political institutions and jurisprudence from Anglo-Saxon times, and includes a study of English courts and procedure of the present day. Recitations and reading. Three hours a week.

PROFESSOR HOWARD.

History.—Modern Europe. Three hours a week.

PROFESSOR HOWARD.

Astronomy.—Young's Elements of Astronomy. Three hours a week.

PROFESSOR BRYANT.

Chemistry.—Qualitative Analysis; laboratory work. The student pursues a systematic course of qualitative analysis, beginning with the detection of one unknown metal, and finally is able to separate the individual metals from the most complex mixture or compound. Three periods a week.

PROFESSOR MCGILTON.

Cryptogamic Botany.—Advanced course. Lectures and laboratory work. Three periods a week.

PROFESSOR BURT.

WINTER TERM—TWELVE WEEKS.

REQUIRED STUDIES:

Psychology.—Study of the Feelings and of the Will. Recitations from text-book; lectures and discussions. Three hours a week.

PRESIDENT BRAINERD.

Geology.—Le Conte's Elements of Geology. Three hours a week.

PROFESSOR BURT.

ELECTIVE STUDIES:

Greek.—Study of the Œdipus Legend (continued). Sophocles, Antigone. Also a comparative study of the tragedians. Three hours a week.

[To be given in 1900-1901; this year's course the same as the Junior elective.]

PROFESSOR EATON.

Latin.—Terence: the translation of the Adelphi, with brief readings from all the other plays. Selections from Seneca and the later tragedians. Three hours a week.

PROFESSOR SANFORD.

Latin.—Selections from the Letters of Pliny (Platner), with sight reading from Cicero. The course is intended to give practice in rapid reading. Three hours a week.

[To be given in 1900-1901.]

PROFESSOR SANFORD.

English Literature.—The Drama: its origin and English development. Three hours a week.

PROFESSOR WRIGHT.

German.—Goethe, Iphigenie auf Tauris. Stern's Studien und Plaudereien (finished). Von Jagemann's German Composition. Three hours a week.

PROFESSOR HENCKELS.

French.—Histoire de la Littérature Française (continued). Composition. Study of the Subjunctive: A. Williams's Subjunctive in French. Sarcey, Le Siècle de Paris. Three hours a week.

PROFESSOR HENCKELS.

Physiological Psychology.—Continuation of the study of the Fall term. Three hours a week.

PRESIDENT BRAINERD.

Pedagogy.—A study of the science on the basis of text-book work and collateral reading; lectures. This course is primarily for those intending to teach. Three hours a week.

PROFESSOR HOWARD.

Constitutional Law.—Principles of Constitutional Law (continued). Examination of leading cases in the Federal and State Supreme courts. Recitations and readings. Three hours a week.

PROFESSOR HOWARD.

History.—History of the Puritan Revolution. Three hours a week.

PROFESSOR HOWARD.

Economics.—Walker's Advanced Course (continued). Study of present economic questions, such as Money, Bimetallism, Banking, Taxation, Labor, Socialism, Co-operation, Tariff, and Tariff History. Recitations, lectures, and library work. Three hours a week.

PROFESSOR HOWARD.

Physics.—Electricity and Magnetism. Static and current electricity, induction, dynamos, electric lighting, and the transmission of power are considered. The work is supplemented by lectures illustrated with laboratory experiments. Three hours a week.

[To be given in 1900-1901; this year's course the same as the Junior elective.]

PROFESSOR BRYANT.

Chemistry.—Qualitative Analysis (continued) and Gravimetric Quantitative Analysis; laboratory work. The characteristic reactions of acid radicals are studied and the complete constitution of unknown bodies is determined. The analysis of minerals and ores forms a part of the work. The various methods for decomposing silicates and refractory substances and bringing them to a condition of solution are carefully studied. Toward the end of the term the student learns the use and manipulation of the chemical balance and makes some simple quantitative determinations of metals. Three periods a week.

PROFESSOR MCGILTON.

Cryptogamic Botany.—Advanced course (continued). Lectures and laboratory work. Three periods a week.

PROFESSOR BURT.

SPRING TERM—TWELVE WEEKS.

REQUIRED STUDIES:

Ethics.—An examination into the Nature and Ground of Moral Obligation, followed by a detailed study of the various practical duties of man. Mackenzie's Manual of Ethics forms the basis for recitation and discussion. Three hours a week.

PRESIDENT BRAINERD.

International Law.—Woolsey's International Law. History; study of treaties and celebrated cases; reading of diplomatic correspondence in international controversies. Recitations and library work. Three hours a week.

PROFESSOR HOWARD.

ELECTIVE STUDIES:

Greek.—Lyric Poetry. Three hours a week.

[To be given in 1900-1901; this year's course the same as the Junior elective.]

PROFESSOR EATON.

Latin.—A study in the Decline of Latin Literature. Selections from Apuleius, Ausonius, Prudentius, Patristic Latin, and the Hymnology of the early Church. The Latin of the Middle Ages. Three hours a week.

PROFESSOR SANFORD.

English Literature.—A study of the principles of literary criticism. Three hours a week.

PROFESSOR WRIGHT.

German.—Goethe, Faust, Part II. Reading and lectures. Three hours a week.

PROFESSOR HENCKELS.

French.—Reading of selected essays from the Sainte-Beuve. French Lyrics. Composition and study of the Subjunctive (continued). Three hours a week.

PROFESSOR HENCKELS.

History of Philosophy.—Lectures, presenting the main features in the development of Philosophy from the time of Descartes. Special topics are assigned for individual research to be presented as theses. Three hours a week.

PRESIDENT BRAINERD.

Pedagogy.—A continuation of the work of the Winter term, with supplementary lectures by the members of the Faculty on the best methods of teaching in their respective departments. Three hours a week.

PROFESSOR HOWARD.

Sociology.—This course includes a study of Race Characteristics, Heredity, Environment, Education, Pauperism, Insanity, Crime and its Punishment, Hospitals, Prisons, and Almshouses. Lectures and readings. Three hours a week.

PROFESSOR HOWARD.

History.—The French Revolution. Three hours a week.

PROFESSOR HOWARD.

Physics.—Electricity and Magnetism (continued). Three hours a week.

[To be given in 1900-1901; this year's elective the same as the Junior elective.] PROFESSOR BRYANT.

Chemistry.—Gravimetric and Volumetric Quantitative Analysis; laboratory work. The work of gravimetric analysis is continued in the handling of more complex substances and their percentage composition is determined. The making of standard solutions and their applications in the determination of the percentage composition of bodies volumetrically form a part of the work. Three periods a week. PROFESSOR MCGILTON.

Geology.—Le Conte's Elements of Geology (continued). Recitations and field work. Three periods a week. PROFESSOR BURT.

LATIN-SCIENTIFIC COURSE.

FRESHMAN YEAR.

FALL TERM—THIRTEEN WEEKS.

Latin.—Test exercises in vocabulary and inflection, particularly practice in handling verb forms. During the term about twenty-five hours are given to a thorough review of the elementary principles of Latin writing, concluding with the study of the development and use of Cases. Written prose exercises, based upon Livy, are required weekly. Selections from Livy, Books I. and XXI., supplemented by eight passages from various authors, are assigned for translation. Four hours a week. PROFESSOR SANFORD.

Rhetoric.—A familiarity with the general principles of rhetoric being assumed, the work is divided between practical composition and a study of the art on the basis of its philosophy. The criticism of work submitted is conducted with each student individually, and the exercises are progressive throughout the year. Three hours a week. PROFESSOR WRIGHT.

German.—Edgren and Fossler's German Grammar. Joynes's German Reader. Volkmann, Kleine Geschichten. Thorough pronunciation is emphasized from the beginning; easy poems and connected

prose extracts, illustrative of the principles of language structure, are committed to memory and recited in class. Conversation in easy German is one of the main features of the daily recitations. Four hours a week.

PROFESSOR HENCKELS.

Mathematics.—Phillips and Fisher's Solid Geometry. Four hours a week.

PROFESSOR BRYANT.

WINTER TERM—TWELVE WEEKS.

Latin.—Weekly exercises in prose deal largely with the subject of the development, history, and use of Mood. Livy, Book XXII., with sight reading from Quintus Curtius, Nepos, and others. The objects sought are fluency of rendering and correctness in the use of English-Latin and Latin-English synonyms. Four hours a week.

PROFESSOR SANFORD.

Rhetoric.—A continuation of the work of the Fall term. Three hours a week.

PROFESSOR WRIGHT.

German.—Grammar. Schiller, *Der Neffe als Onkel*; Baumbach, *Der Schwiegersohn*. Poems and prose extracts committed to memory. Composition and conversation. Four hours a week.

PROFESSOR HENCKELS.

Mathematics.—Hall and Knight's Elementary Algebra. Four hours a week.

PROFESSOR BRYANT.

SPRING TERM—TWELVE WEEKS.

Latin.—Weekly exercises in prose; topics: Indirect Discourse and the Periodic Structure. Selections from the Philosophical Treatises and Letters of Cicero. An outline of history as far as through the twelve Cæsars is studied to determine the place of Rome as related to contemporaneous nations. Special topics from the historians are assigned for library reading. Four hours a week.

PROFESSOR SANFORD.

Rhetoric.—A continuation of the work of the Fall and Winter terms. Three hours a week.

PROFESSOR WRIGHT.

German.—Grammar. Noveletten Bibliothek, Vol. I.; Harris's German Composition; committing to memory. Composition and conversation. From the beginning of this term German will be as far as possible the medium of communication in the class-room throughout the course. Four hours a week.

PROFESSOR HENCKELS.

Mathematics.—Phillips and Strong's Plane and Spherical Trigonometry. Four hours a week. PROFESSOR BRYANT.

SOPHOMORE YEAR.

FALL TERM—THIRTEEN WEEKS.

Latin.—Prose exercises; Periodic Structure (continued), with exercises in dictation and analysis of sentences in Tacitus and Cicero. Germania and Agricola of Tacitus. Outline of the history of the later Empire, with brief investigation of the subject of the influence of Rome upon the Northern tribes. Library reading and the study of photographs of Roman remains in Germany and England. Three hours a week. PROFESSOR SANFORD.

German.—Goethe, Dichtung und Wahrheit. Bernhardt's German Composition. Three hours a week.

PROFESSOR HENCKELS.

Physics.—Fundamental units of measurement. Kinematics, Dynamics, Work and Energy. Properties of matter. Molecular forces. Three hours a week. PROFESSOR BRYANT.

Physiology.—Huxley's Elementary Lessons. Two hours and one period of laboratory work a week. PROFESSOR BURT.

Zoology.—Lectures with supplementary reading in Hertwig's Principles of Zoology. Two hours and one period of laboratory work a week on Invertebrates. PROFESSOR BURT.

WINTER TERM—TWELVE WEEKS.

Latin.—Selected Odes and Epodes of Horace. By comparison with other poets particular attention is given to the literary study of the verse. Lectures on the private life of the Romans and on Mythology, illustrated with photographs and lantern slides. Very careful preparation of note books is required. Three hours a week.

PROFESSOR SANFORD.

German.—Freytag, Die Journalisten. Schiller, Das Lied von der Glocke. Advanced Grammar and Composition. Three hours a week. PROFESSOR HENCKELS.

Civil Government.—American Constitutional History and Law. History of the development of American political institutions, study

of colonial charters, examination of leagues and confederations, history of the formation and adoption of the Federal Constitution, including a careful study of the text. Recitations, supplemented by lectures and library work. Three hours a week.

PROFESSOR HOWARD.

Physics.—Density. Sound: speed, energy, reflection, refraction, and interference of sound waves. Heat: temperature, calorimetry, fusion, vaporization, thermo-dynamics. Three hours a week.

PROFESSOR BRYANT.

Botany.—Morphology of Cryptogams. One lecture and two periods of laboratory work a week.

PROFESSOR BURT.

SPRING TERM—TWELVE WEEKS.

Latin.—Dictation exercises, Etymology and the study of early Latin forms (Allen, Wilmann, Wordsworth). The Trinummus of Plautus with lectures and library reading on the subject of the Roman Theater. Three hours a week.

PROFESSOR SANFORD.

German.—Goethe, Hermann und Dorothea. Advanced Grammar and Composition. Three hours a week.

PROFESSOR HENCKELS.

Physics.—Light: reflection, refraction, interference, diffraction, and polarization of light waves, and spectrum analysis. Electricity: electrostatic induction and potential, electrostatic machines, electrical units and measurements, magnetic induction and potential, electro-magnetic induction, dynamo-electric machines. Three hours a week.

PROFESSOR BRYANT.

Botany.—Gray's Lessons; preparation of herbarium specimens; lectures. Two hours and one period of laboratory work a week.

PROFESSOR BURT.

Zoology.—Morphology of Vertebrates. One lecture and two periods of laboratory work a week.

PROFESSOR BURT.

JUNIOR AND SENIOR YEARS.

In the Junior and Senior years, the studies of the Latin-Scientific Course are identical with those of the Classical Course already given on the preceding pages.

DEPARTMENTS OF INSTRUCTION.

LANGUAGE AND LITERATURE.

GREEK.

The work in this department is arranged with the design of giving the student a broad and scholarly view of the Greek language and literature.

During the first part of the Freshman year, the language itself is made the chief object of study, in order that the student may become thoroughly familiar with the essentials in etymology and syntax. As the writing of Greek is one of the most successful ways of attaining an exact knowledge of the language, considerable time is given to Greek composition during the earlier part of the course.

A knowledge of Greek literature can best be obtained by an extended study of the literature itself; the reading of Greek at sight is therefore practiced in order that the ability to read the literature with some degree of facility may be acquired.

Different periods of Grecian history are examined in connection with some of the authors which are read.

As an acquaintance with the various kinds of literature is a matter of great importance, the works of many different writers are made the subject of study. The history of the literature is studied in order that the relation in which the authors read stand to one another and to the contemporary Grecian world may be carefully considered. In connection with the study of the writings of an author, attention is given to his position in the development of the literature.

LATIN.

An ideal, at least three-fold, should be presented to the student about to enter upon a course of Latin reading: to interpret Latin, not only in the best idiom of his own language but by the Latin itself without the medium of his own tongue; to obtain a general but clear view of the relation of the Roman writings to the other literatures of the ancient world, as well as of the debt of the modern languages to the Latin; and to form some adequate estimate of the influence of the Roman nation in history.

With a view toward the best insight into the structure of the language, and the later reading of the Latin without translation, in the first two years of the course one hour in four is set apart for a thorough review of grammatical principles through exercises in prose composition. Students will be expected, on entering, to have such ready familiarity with forms as to be able to take up at once a somewhat critical study of the structure of the sentence. The material for this work in composition is selected from the authors translated by the class. It is found that no quicker understanding of the sentence order of a language is gained than by an attempt to write it after the best models.

No author is read without comparison of his style with that of others of his period. Sufficient range of prose writers and poets is offered in the entire course to allow a fair estimate of Latin literature as a whole.

As the different authors present to the classes their several views of Roman life and customs, the influence of the national life upon the contemporary world is strongly emphasized; the continuity of that influence to the present time is considered especially important in any presentation of a general historical nature.

Special courses in Literature, Antiquities, Topography, and Art are offered in the elective work. These courses are conducted by means of recitations, private reading of

selected authors, and illustrated lectures. Maps and photographs are freely used as indispensable helps.

ENGLISH.

The study of English is on the two-fold basis of the language and the literature. Text-books are supplemented by the materials of the library and work is brought to date, so far as practicable, by the additional means of lectures. The department aims to secure a knowledge of historical development in the English tongue; an appreciation of what is best in the writings of its users; and ability in personal practice for creditable literary work. To secure these results three lines of study are pursued:

I. *English and American Literature*.—The Fall and Winter terms of the Junior year are given to a general survey of the principal English authors from Chaucer to the present time, with a rapid treatment of the various phases of English literary development. The leading facts of English history are also discussed, whenever they are necessary to an adequate understanding of the subject. The work is introductory to the more detailed investigations of the various elective courses in English and American Literature offered throughout the remaining terms.

II. *Rhetoric and the English Language*.—The work in rhetoric is placed at the beginning of the college course and is continued through three terms. A familiarity with the common rules of rhetoric is assumed and the study is conducted largely from the standpoint of its philosophy; an abundance of written work, however, is introduced for its immediately practical results. The Spring term of the Junior year is given to a consideration of rhetoric as the art of persuasion, with Whately as a text-book.

Two terms' work in Old and Middle English is offered to members of the Junior class, with collateral study of the history of the English language. The literature of the

periods will be treated throughout the course, but the work in Old English will be conducted for the most part from the linguistic side, with a special view to showing the foundations of English speech.

III. *Rhetoricals*.—Rhetorical exercises, attended by the entire college, are conducted in the chapel on Saturday mornings. Their aim is to train the students in the appropriate presentation of original thought. Four orations are delivered by each Senior, Junior, and Sophomore.

GERMAN AND FRENCH.

Fully two-thirds of the advanced knowledge and thought of the world is published in the German and French languages. In quantity and value of records of new and independent investigation and discovery, the French comes next to the German. The English-speaking student or professional man who is able to read fluently the German and French languages has access thereby to nearly all the valuable records of investigation at the present day in any department of human knowledge.

While the ability to read German and French freely is a valuable acquisition to the man of business in America, as in other countries, it is an absolute necessity to the educator, the investigator, and the professional man who does not wish to be left hopelessly in the rear by those who possess this ability and use it.

It is admitted that of all living languages the German affords the best opportunity for mental discipline. Throughout the first year the aim is primarily to give to the student a grammatical and practical knowledge of German and of French—to form an adequate introduction to the study of their literatures in subsequent years. By a practical knowledge is meant ability to read these languages readily without translating, ability to understand them with ease when spoken, and ability to use them in both speaking and

writing; this ability to understand the spoken as well as the written language is secured by conducting in the language studied the most of the work in the different courses.

PHILOSOPHY.

The department of Philosophy is under the charge of the President. Three hours a week are required throughout the Senior year, and three hours more a week may be taken as an elective. The aim in this course is to direct the student to the highest sources of knowledge concerning himself and his relations to nature and to God.

PSYCHOLOGY.

The Science of Mind is pursued through the Fall term. It is taught chiefly as an empirical science; speculative and metaphysical questions are kept largely in the background; the aim is principally to ascertain the various modes of mental activity, to determine the scope and function of the several faculties of the mind, and to discover how they can be best developed and trained. Parallel with this work those who so elect may study Mental Physiology, in which the relation between mind and the nervous mechanism is considered in the light of modern research.

MORAL SCIENCE.

During the third term three hours a week are required for the study of Moral Science. This involves a consideration of the fundamental principles of Christian morality, and of the relation of the teachings of Christ to the highest truths of philosophy and life.

HISTORY OF PHILOSOPHY.

During the Winter and Spring terms the History of Philosophy is taught as an elective. The more important systems of thought that have appeared in the past are discussed and criticised; and as far as practicable the present status of metaphysical problems is presented.

PEDAGOGY.

In view of the fact that many graduates become teachers, a course in Pedagogy is offered to the Senior class. This course will be under the immediate supervision of one instructor and will be based upon a text-book, but each of the other members of the Faculty will supplement it with lectures upon the theory and practice of teaching as applied to his particular department. In addition, the study of Psychology will be pursued, under the direction of the President, with special reference to the subject of mind development and training. The course as thus formulated, with collateral reading, is intended to represent a full year's work in Pedagogy and methods of teaching as pursued in the leading Normal Colleges of the country.

HISTORY AND POLITICAL SCIENCE.

HISTORY.

The course of instruction in History and Political Science has been arranged so as to form a consecutive whole. It commences in the Sophomore year. A general knowledge of the history of England and America is assumed, and

special attention is first given to the study of the constitutional development of those countries. The growth of the present American and English political institutions is traced from their very first manifestations down to the present day. The required course in general history, in the Junior year, is made as broad and thorough as possible, and, at the same time, is intended to serve as a special preparation for the studies of constitutional and international law, political economy, and political science, which follow, and for which such a course is considered essential, as giving the necessary ground-work. While following in the main the broad outlines laid down in the text-book, the course is supplemented by outside reading, and the student constantly referred to the principal treatises, and leading authorities. In an alternating elective course running through the Junior and Senior years, important epochs in mediæval and modern history are considered in detail.

POLITICAL SCIENCE.

The aim in this department is to instruct the student as to the workings of government, and then to prepare him to meet intelligently the social and economic questions that are likely to confront him. The work begins in the Junior year with the study of political institutions, federal, state, and municipal, both separately and in their bearings on one another.

In Political Economy, which commences in the Senior year, the first term is devoted to a study of the leading principles of economic science, the aim being to give a general outline of the subject; the second term is elective and devoted to the study of the historical development of the subject and of the relation of economic life to economic thought.

In Constitutional Law the object is two-fold: first, to acquaint the student with the present constitutions of the

leading countries ; second, to trace the rise of each institution historically. In International Law the general principles of the subject are outlined and special attention is given to the leading treaties of the United States.

The course in this department allows of considerable latitude, so that important questions, such as Modern Socialism, Labor Organization, Nationalization of Land, Management of Railroads, Banking, Money, Tariff, Interstate Commerce, Taxation, etc., may be taken up to meet the needs of the students. But whatever the subject, special importance is attached to original research and investigation. To that end library work is insisted upon and special theses and reports are frequently demanded. And in general, both in the required and in the elective work, investigation from the original sources and by independent methods is encouraged, and collateral reading is required.

MATHEMATICS AND ASTRONOMY.

The instruction in this department is given with a two-fold purpose. There is first the aim to give the student such a thorough knowledge of the facts and principles that he will be able to apply them in the solution of any problem requiring them. Second, and of even more importance, is the endeavor to train the mind of the student in logical thinking and close reasoning. The mathematical exercises calling for accurate definition and correct reasoning are intended to be so applied as to enable the student to acquire the power of grasping any subject and reasoning about it, whether that subject be mathematical or not.

The work begins with a thorough training in Algebra and Geometry, as the necessary foundation for all further mathematical study. These are followed by Plane and

Spherical Trigonometry, which occupy the remainder of the Freshman year. Elective courses in Analytical Geometry and in Differential and Integral Calculus are offered in the Junior year. The object of these elective courses is to enable those wishing to take up further work in engineering to prepare themselves for it.

Astronomy is a Senior elective. The aim is to give the student a thorough knowledge of the fundamental principles of this important science, but especial prominence is also given to the important results attained by the most recent advances in physical science.

MECHANICS AND PHYSICS.

The course in Physics is introduced by a thorough discussion of the principles of Statics and Dynamics during the Fall term of the Sophomore year. The remainder of the year is given to a study of the principles of general Physics, the subjects being abundantly illustrated with experimental lectures in the Physical Laboratory.

The further study of Physics is made elective, a course in Heat and Light being given during the Winter and Spring terms of the Junior year. This course alternates with one in Electricity and Magnetism, and is open to Juniors and Seniors alike, thus giving every student the opportunity to take either course or both.

CHEMISTRY.

The instruction in required Chemistry is designed to give the student an insight into the philosophy of the science,

and at the same time to make him practically acquainted with the more frequently occurring elements and compounds. In addition, the student is expected to become so familiar with chemical manipulation by working at the laboratory tables that he can arrange apparatus and make experiments illustrating the principles discussed in the ordinary textbooks.

Each member of the Junior class will spend six hours a week during a portion of the Winter term and the entire Spring term in laboratory work.

Chemistry as a Senior elective through the entire year is devoted exclusively to laboratory work, in the following courses:

Course I.—Qualitative Analysis in the Fall term, in which special attention is given to the analytical reactions of each base and to practice in the separation of metals from each other in unknown liquid and solid mixtures. The analytical reactions of each acid and the separations of the acids are also carefully studied. Full notes are made by the student on all processes and reactions involved and frequent reports are made to the instructor.

Course II.—Gravimetric Quantitative Analysis in the Winter term.

Course III.—Volumetric Quantitative Analysis in the Spring term.

Courses II. and III. are elective only for those who have completed Course I. Mineral analysis and the determination of the constitution of unknown substances form a large part of the above courses. Besides performing indicated work, the student is encouraged to enter upon some work of independent investigation.

(Apparatus and material are furnished by the College; that broken or used is paid for by the student.)

NATURAL HISTORY.

The purpose of the work in this department is to give such a view of the earth and of its living organisms—objects always about us and constantly presenting peculiar and interest-arousing problems—as should, because of its importance, be included in a liberal education. This view is made as real as possible by appropriate laboratory studies. In addition to their general educational value, the various courses possess a special value for those intending to take university work in the same lines, to teach, to enter the ministry, or to study medicine.

The following outline shows the arrangement of the work:

SOPHOMORES (required).

1. *Zoology*.—General course; entire class; Fall term.
2. *Human Physiology*.—Latin-Scientific division; Fall term.
3. *Botany*.—Morphology of Cryptogams; Latin-Scientific division; Winter term.
4. *Zoology*.—Morphology of Vertebrates; Latin-Scientific division; Spring term.
5. *Botany*.—General course; entire class; Spring term.

JUNIORS AND SENIORS (elective).

6. *Cryptogamic Botany*.—Fungi and Lichens; Fall and Winter terms.
7. *Histology and Physiology of Plants*.—Fall and Winter terms.
(Courses 6 and 7 are given in alternate years.)

SENIORS.

8. *Geology*.—Required, Winter term; elective, Spring term.

ZOOLOGY.

The work in Natural History opens at the beginning of the Sophomore year with a course in Zoology, in which the chief groups of animals are considered not only with regard to their morphology but also from the standpoint of

their embryological development. The aim of the course is to give not only a familiarity with the general forms of animal life but also a knowledge of some phases of the evidence in regard to the evolution of life, and to prepare the student to read the more understandingly current literature which has to do with variation, heredity, and other biological problems. The laboratory work is devoted to Invertebrates and begins with the study with the microscope of *Amœba* and *Paramecium* or *Vorticella* by each student. The invertebrate material which can be obtained, for class use, from the region about is supplemented by marine forms from the Marine Biological Laboratory at Wood's Holl.

The other courses in Zoology are Human Physiology during the Fall term and Morphology of Vertebrates during the Spring term of the Sophomore year. The former course is made as practical as possible by laboratory demonstrations and by the student's study of preparations showing the microscopic structure of the more important organs and tissues. In the latter course the laboratory work on Vertebrates is a direct continuation of that on Invertebrates in Course 1.

BOTANY.

The work in Botany begins with an introductory course, in which the morphology of the Cryptogams, or flowerless plants, is taught by the laboratory study with the microscope of selected illustrative plant types, ranging from Unicellular Algæ and Fungi to Mosses and Ferns. This is a required course for the Latin-Scientific division and is followed in the Spring term by a course of more general nature—Course 5—taken by the entire Sophomore class. This last is a companion course to Course 1 in Zoology. The laboratory work is upon the gross structure and functions of Phænogams, or flowering plants. In addition to the lectures, the recitations cover Gray's lessons and the student is trained to some degree of facility in the determination of

flowering plants and encouraged to enter upon the formation of an herbarium, but only a part of the time of the course is so available.

Elective work in Botany is open to Juniors and Seniors in two courses, each of which extends through the Fall and Winter terms. These courses are given in alternate years. In the advanced course in Cryptogamic Botany, the attention is given for periods of several weeks each to Basidiomycetes, Myxomycetes, Bacteria, Moulds, Pyrenomycetes, and Lichens. The laboratory work is largely on collections or cultures made by the students. The course aims to give knowledge of the morphology, life history, and relationships of these not generally understood plants and, in certain groups, to give practice in specific determination and acquaintance with the best works on the various groups. In the case of the Basidiomycetes (mushrooms and toadstools), the early opening of the college year makes it possible to study in their fresh condition plants of most of the genera and to identify many species of economic interest. In the alternate course the objects of study are the microscopic structure of the tissues of plants; the physical, chemical, and vital properties of protoplasm and its relations to its surroundings; and such vital processes as the absorption of food, its conduction through the plant and its assimilation, also growth, nuclear phenomena, reproduction, repair, fall of leaves, nitrification of the soil, etc.

GEOLOGY.

The work in Natural History closes with a course in Geology given to the Senior class during the Winter and Spring terms. The forces now in operation are considered as active agents through past time in shaping the earth into its present condition. The geological history of the earth and of its general formations is treated and the geology of the region about is taken up in greater detail, excursions to points of geological interest in the vicinity being made.

GENERAL INFORMATION.

LOCATION.

Middlebury College is on the Rutland Railroad, midway between Rutland and Burlington, and has ready communication with all parts of the land ; it is, however, unusually free from the temptations which are wont to be found in a college town.

The location of the College, near to Otter River, can hardly be surpassed for delightful scenery, the view including the Champlain Valley, the Green Mountains, and the Adirondacks. The atmosphere is remarkable for its purity, being exposed to no malarial influence from any conceivable source. The absence of serious illness among the students for many years has been a most gratifying fact.

RELIGIOUS SERVICES.

The exercises of each day except Sunday begin with religious services, which all students are expected to attend.

They are required to attend public worship on Sunday morning, at such churches as are decided upon by the students or their parents.

In a room fitted up for the purpose, the Young Men's Christian Association holds meetings on Tuesday evenings and the Young Women's Christian Association on Wednesday afternoons, to which the students are welcome.

EXAMINATIONS.

All the classes have examinations in the studies pursued during the term, at the close either of the term or of the study.

LABORATORIES.

Physical Laboratory.—This occupies a large room on the third floor of the Chapel building. It is equipped with apparatus for use in the experimental lectures illustrating the laws of mechanics, sound, heat, light, electricity, and magnetism. There is also apparatus for the determination of the physical units and constants. A heliostat by Brashear gives exceptional facilities for the use of the solar lantern, microscope, and all experimental work in light. A workshop in connection with the laboratory is fitted with lathe and tools for the construction or repair of apparatus.

Chemical Laboratory.—This occupies four rooms on the first floor. The largest room is used for lectures and recitations and contains fifteen double desks, each thoroughly furnished with running water, pneumatic trough, chemicals, and chemical apparatus for the performance of all important experiments and analysis; several Sprengel-Bunsen pumps are provided for rapid filtrations and for producing air blasts in blow-pipe analysis. Connected with the main room is the combustion room, furnished with "draught hoods," drying ovens, and hydrogen-sulphide apparatus.

The laboratory for Quantitative Analysis contains twenty desks and all necessary apparatus for doing thorough work in both gravimetric and volumetric quantitative analysis; adjoining this room is the balance room, equipped with Becker chemical balances so mounted as to be free from all outside vibrations. The chemical laboratory has a departmental library, where all the important books of reference are to be found and the leading chemical journals are kept on file. The chemical laboratory throughout is lighted with electricity. All work in the laboratory is conducted under the direct supervision of the Professor of Chemistry.

Biological Laboratory.—The department of Natural History occupies three rooms on the ground floor. The rear room, conveniently connected by special stairway with the

geological and botanical collections in the Museum above, is used as the lecture room; the middle room is assigned to the professor in charge as a private laboratory; the front room has been fitted up as a practical working laboratory for students' use in the various courses of the department. This laboratory is provided with suitable tables, lockers, and cases. Its equipment includes seventeen compound microscopes—one Wales, eight Zeiss, four Bausch and Lomb, and four Reichert—sixteen of which are of the approved continental model for laboratory use; also dissecting microscopes, dissecting pans, injecting and imbedding apparatus, Minot microtome, dry and steam sterilizers, culture apparatus for work with bacteria and fungi, reagents, and alcoholic material for study.

MUSEUM.

The Museum occupies the greater part of the second floor of the Chapel building and is well lighted from three sides. Its varied collections include Assyrian tablets and casts and other objects of interest in Semitic history; a set of the costumes and implements of the natives of the Yukon Valley, and relics of local and general historic interest.

The Natural History collections are here displayed. In Botany there is a complete series of the flowering plants and ferns of the Champlain Valley, collected by President Brainerd; collections of the Cryptogams—and more especially of the Higher Fungi of Vermont—are now being accumulated by Professor Burt. In Zoology the native birds are represented, and also sponges, corals, and other marine forms, contributed in part from the collections of the United States Fish Commission.

A collection representing the rocks of the state was made during a geological survey conducted by Professor Adams, then occupying the Chair of Natural History. He also arranged a series of fossils representing the different geolog-

ical formations, and this collection has since been enriched by notable additions from many sources. Besides this general series, a special collection of the fossils of the Champlain Valley has been made, largely by Professor Seely.

For instruction in Mineralogy, a complete working set of minerals is to be found upon the shelves, and material for the study of general Petrology is also abundant.

A valuable collection of shells for instruction in Conchology is contained in the Museum; also a full series, collected and arranged by Professor Adams, of the land and water shells of Vermont.

The Professor of Natural History is Curator of the Museum.

LIBRARY AND READING-ROOMS.

The College Library is in the north division of Painter Hall. It contains 23,000 volumes, and is a depository of government publications. All the books are accessible to students, and complete catalogues, book and card, both of authors and of subjects, inform them as to the location of any volume. The first floor is conveniently furnished as a consultation or reference room. The books of reference, magazines, catalogues, and indexes are mostly here. Adjoining the main reference room is a commodious reading-room, supplied with the current numbers of many of the more valuable reviews and magazines. The library is open seven hours each week-day except Saturday, when it is open during the morning only.

In the south division of Painter Hall, a second reading-room, open during each day and evening, contains an assortment of daily and weekly papers.

GYMNASIUM.

The Gymnasium in the south division of Painter Hall is supplied with apparatus adapted to the systematic physical development of the students. In connection with it are

bath rooms and a dressing-room furnished with lockers. It is open during the whole day and evening.

RECORD OF MERIT.

A class-book is kept by each instructor, in which the character of each student's recitation is noted by numbers. At the close of a study, any student who desires it may receive from the secretary of the Faculty a general statement of his rank in that study. If he has attained 90 per cent. or above, his work is classed as A, or excellent; if between 80 and 90 per cent., as B, or good; if between 70 and 80 per cent., as C, or fair; if between 60 and 70 per cent., as D, or passable. Reports to parents are upon the same basis.

COLLEGE HONORS.

On the Record of Merit, including recitations and examinations, the Faculty, under the direction of the Corporation, have arranged a scheme of honorary appointments for Junior Exhibition and Commencement.

SPECIAL HONORS.

To promote and encourage special investigation in the various departments of liberal study, the Faculty have established a system of honors. These are divided into two classes, called Honors and Highest Honors. They are awarded in the following departments:

(1) Classics. (2) English. (3) Modern Languages. (4) Philosophy. (5) History and Political Science. (6) Mathematics. (7) Physics and Chemistry. (8) Natural History.

In all departments except Classics these honors are awarded on two conditions:

1. The attainment of 80 per cent. for Honors, and of 90 per cent. for Highest Honors, in all the studies of the department in which the honors are sought,

2. The performance of a satisfactory piece of additional work, assigned by the Professor, which must be of a superior quality for the attainment of Highest Honors. Very superior quality in this work will offset a *slight* deficiency in rank.

In Classics, Second-year Honors in both classes will be awarded on two conditions:

1. The attainment of 80 per cent. for Honors, or of 90 per cent. for Highest Honors, in the required classical studies of Freshman and Sophomore years.

2. The passing of special examinations upon a prescribed course of additional work in this department.

Final Honors will be awarded to those students who have taken Second-year Honors, have passed with distinction in at least one year's elective work in both Greek and Latin, including translation at sight, and have presented a satisfactory thesis upon a specially assigned subject.

These honors will be announced when degrees are conferred at Commencement, be printed in the next annual catalogue, and be certified to by a written certificate from the President and the Professor of the department, stating the nature and quality of the extra work done.

PRIZES.

The College has received from the estate of the late Rev. Thomas A. Merrill, D. D., the sum of fifteen hundred dollars, the interest of which is applied annually "for the encouragement and improvement of elocution." Doctor Merrill, a graduate of Dartmouth College in the class of 1801, was for fifty years a resident of Middlebury and for thirty-seven years pastor of its Congregational church. For the Merrill Prizes not less than eight nor more than twelve competitors are appointed from the Sophomore class in such manner as the Faculty shall deem expedient. There are

four awards, the first \$30, the second \$25, the third \$20, and the fourth \$15.

The Parker Prizes are given to the two of the four competitors in the Freshman class who are judged the best speakers; the first prize is \$24, the second \$12.

BENEFACTANT FUNDS.

The Waldo Fund, given by the late MRS. CATHARINE WALDO of Boston, and the Baldwin Fund, received from the estate of the late JOHN C. BALDWIN, Esq., of Orange, N. J., furnish liberal aid in payment of term bills of students. The income of these funds is used:

1. In canceling the term bills, to the amount of \$80, of each of twelve students, whose scholarship, deportment, and necessities warrant such a benefaction.
2. In canceling, wholly or in part, the term bills of such other students as are provided for by the terms of the legacies.

The income of the Warren Fund is applied in payment of the term bills of those who are preparing for the Gospel Ministry. Those preparing for the Congregational Ministry can also receive aid, after the Freshman year, from the American Education Society, usually to the amount of \$75 annually.

SCHOLARSHIPS.

A Scholarship Fund has been secured, which may be made available to those whose circumstances require it. The control of these scholarships is in the hands of individual proprietors, but students of good character and correct deportment can usually obtain assistance from this source.

By a recent gift of \$2,000 from the Emma Willard Association, a scholarship paying \$100 annually has been established for deserving young women.

In addition to these, the following Scholarships, provided by donations of \$1,000 each, yield to the persons placed upon them by the donor the sum of \$60 a year to be credited upon the term bills:

1. The "Fairbanks Scholarship," by THADDEUS FAIRBANKS, Esq., of St. Johnsbury, Vt.
2. The "Fairbanks Scholarship," by THADDEUS FAIRBANKS, Esq., of St. Johnsbury, Vt.
3. The "Levi Parsons Scholarship," by HON. LEVI PARSONS MORTON, of New York City.
4. The "Daniel O. Morton Scholarship," by HON. LEVI PARSONS MORTON, of New York City.
5. The "Penfield Scholarship," by ALLEN PENFIELD, Esq., of Burlington, Vt.

It is to be understood that negligence or misconduct will forfeit beneficiary aid.

STATE SCHOLARSHIPS.

An annual appropriation from the State of Vermont pays to the amount of \$80 annually "the tuition and incidental college charges of thirty students, one of whom shall be designated and appointed by each Senator in the General Assembly, such appointment to be made by such Senator from his respective county, provided any suitable candidate shall apply therefor, otherwise from any county in the State."

Any person, prepared to enter college, desiring to take advantage of a State scholarship, should apply to one of the Senators of the county in which he resides, and the Senator may thereupon give him a certificate of appointment, which will admit him to the college without other conditions than those required of all other students. Should the Senators in the applicant's county already have made their appointments, the student should immediately apply to the Presi-

dent of the college, as there may be a vacancy from some other county of which the applicant may avail himself.

Under this act students of both sexes are eligible for appointment to a State scholarship.

DORMITORIES.

Starr Hall has accommodations for sixty-four men. Each suite consists of a study, a bedroom, and closets and is intended for two students.

Painter Hall has five suites of rooms, which will accommodate two men each. These suites have study, bedroom, and closet, are heated with steam and lighted with electricity. In this building, in addition to the room rent, there is a charge of \$25 for each suite for heat and light; this bill must be settled at the end of the Fall term. The rooms in both Halls are unfurnished.

STARR BOARDING HALL.

This Boarding Hall is for men and was established from funds contributed by Charles and Egbert Starr. The college furnishes the building and furniture. The cost of board rarely exceeds \$2.50 per week, and is generally less.

BATTELL HALL.

The large dwelling-house, built by President Kitchel and purchased by the college with funds bequeathed by Hon. Joseph Battell of the class of 1823, has, through the generosity of three friends of the institution, been fitted up for the use of the young women in college. The building is heated with steam, the rooms are all comfortably furnished except with lamps and linen, and the management is placed in the hands of a competent matron, Mrs. Charles N. Brainerd. By this arrangement room and board are furnished for \$4.00 a week.

EXPENSES.

The following statement embraces the principal expenses for the year, except for clothing and text-books:

Tuition, \$20 per term.....	\$60.00
Annual Fee for incidentals (covering expenses of public rooms, library, reading room, gymnasium, etc.).....	12.00
Room Rent in Starr or Painter Hall (if two occupy a room)	15.00
Board for 38 weeks, at \$2.50, in the Starr Boarding Hall.....	95.00
Fuel, lights, and washing.....	25.00
	<u>\$207.00</u>

When a room is occupied by one student, \$8 a term is charged.

A fee of \$2 a term is charged to Juniors to defray the expenses of the Laboratories and Museum, and a fee of \$2 a term to Seniors electing laboratory courses.

All college bills are to be settled annually, such settlement being a condition precedent to the continuance of the student in college; the college bills of Seniors must be settled not later than two months before Commencement.

The principal railroads in Vermont carry students for two cents a mile between Middlebury and their places of residence.

DEGREE OF MASTER OF ARTS.

The degree of Master of Arts is conferred on the following conditions:

1. The candidate must have a Baccalaureate degree from this college or from one having an equivalent curriculum.

2. He must have completed a thorough course of graduate study, not professional, in some special branch approved by the Faculty, sufficient in amount to be a fair equivalent for a fifth year of college work; in proof of which he must present a thesis and pass a satisfactory examination.

3. By continuous residence at the college, a candidate fulfilling the above requirements may receive the degree one year after graduation. In case of partial or complete non-

residence, the degree will not be conferred in less than two years after graduation.

4. On registration as candidate a fee of \$5 will be charged. Resident candidates will receive tuition free, but all other charges will be the same as for undergraduates. Before the degree is conferred an additional fee of \$5 for a resident and \$10 for a non-resident will be required.

NECROLOGY.

An Obituary Record is published from time to time. For this publication brief biographical notices of deceased graduates are desired. Any person who can furnish such notices will confer a favor by sending them to President Ezra Brainerd.

GENERAL CATALOGUE.

Work upon a new general catalogue is in progress and the volume will be issued early in 1900.

THE CENTENNIAL ANNIVERSARY.

The Centennial Anniversary of the College will be celebrated in July, 1900, in connection with the annual Commencement. There will be an Educational Conference with addresses by eminent educators, the presentation of a Roman Drama, a Centennial Oration and Centennial Poem by prominent alumni, and a Centennial Banquet. At this time the new Library, erected through the bequest of Egbert Starr, will be dedicated.

DEGREES CONFERRED IN 1899.

DEGREES IN COURSE.

A. B.

EUGENE COOK BINGHAM,	ROBERT LE ROY THOMPSON,
FRANK WILLIAM CADY,	AUGUSTA MARIA KELLEY,
DONALD PAUL HURLBURT,	SARAH SCOLES,
WILLIAM BELDEN RICHMOND,	LUCY WALKER SOUTHWICK,
GEORGE WILLIAM STONE,	ANNIS MILLER STURGES.

B. S.

LOREN ROY HOWARD,	ERNEST JAMES WATERMAN,
HARRY FOSS LAKE,	MARY ANNETTE ANDERSON,
CLAYTON ORVILLE SMITH,	ADALINE CHARLOTTE CRAMPTON,
RUFUS WAINWRIGHT, JR.,	MILDRED GRACE POTTER.

APPOINTMENTS AND AWARDS.

COMMENCEMENT APPOINTMENTS.

Valedictory MARY ANNETTE ANDERSON.
Salutatory ADALINE CHARLOTTE CRAMPTON.

HIGHEST HONORS IN ENGLISH.

WILLIAM BELDEN RICHMOND.

HONORS IN ENGLISH.

FRANK WILLIAM CADY.

HIGHEST HONORS IN CHEMISTRY.

EUGENE COOK BINGHAM.

HIGHEST HONORS IN BOTANY.

CLAYTON ORVILLE SMITH.

JUNIOR EXHIBITION HONORS.

HERBERT ELI BOYCE,
GUY BERTRAM HORTON,
AMOS BUSH WILLMARTH,
CLARA BELLE ANDREWS,
FLORENCE MAY ANDREWS,
RENA ISOBEL BISBEE,
SARA VINCENT MANN,
FRANCES ELISABETH NICHOLS,
ALICE MAY SMITH,
BELLE ELIZABETH WRIGHT.

These honors are of equal rank.

MERRILL PRIZES.

Class of 1901—

First Prize—GLENN WILLIAM WHITE.
Second Prize—REID LANGDON CARR.
Third Prize—FRED JOHN BAILEY.
Fourth Prize—JOHN EARLE PARKER.

PARKER PRIZES.

Class of 1902—

First Prize—FAY ALTON SIMMONS.
Second Prize—JESSE CARLYLE FRENCH.

CALENDAR.

1899.

June 28—Commencement—Wednesday.

SUMMER VACATION OF TWELVE WEEKS.

September 21—Fall Term began—Thursday.

December 22—Fall term ends—Friday.

WINTER VACATION OF TWO WEEKS.

1900.

January 9—Winter term begins—Tuesday.

April 3—Junior Exhibition—Tuesday evening.

April 3—Winter term ends—Tuesday.

SPRING VACATION OF ONE WEEK.

April 12—Spring term begins—Thursday.

July 1—Baccalaureate Sermon;

Anniversary of the Christian Associations—Sunday.

July 2—Class Day Exercises;

Dedication of the Library;

Parker and Merrill Prize Speaking—Monday.

July 3—Meeting of the Associated Alumni;

Commencement—Tuesday.

July 4—Educational Conference;

Roman Drama—Wednesday.

July 5—Centennial Oration and Poem—Thursday.

July 6—Examination of candidates for admission—Friday.

SUMMER VACATION OF ELEVEN WEEKS.

September 20—Fall term begins—Thursday.

December 21—Fall term ends—Friday.

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